CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	NELO Multiple Gravel Test pits Wheatland and Golden Valley County
Proposed Implementation Date:	June 2019
Proponent:	Montana Department of Natural Resources and Conservation, NELO & MMB
Location:	8N 13E 14, 8N 15E 24, 10N 19E 36, 11N 20E 36
County:	Wheatland and Golden Valley
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Test permit to test for road building aggregates with a backhoe on state trust lands.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The Department of Natural Resources and Conservation (DNRC)
Northeastern Land Office (NELO)
Proponent: Montana Department of Natural Resources and Conservation, NELO & MMB
Surface Lessees: Sheep Valley Reinhart Trust, McFarland-White Ranch, Eugene W Tierney Jr, Killam Ranch Properties LP, Wilks Ranch Montana LTD LP

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The DNRC, and NELO have jurisdiction over this proposed project.

The proponent is responsible for acquiring all required permits for the proposed project. The proponent is responsible for settling all surface damages with the surface lessees.

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department does not grant a test permit to search for road building aggregates.

Alternative B (the Proposed Action) – Under this alternative, the Department does grant a test permit to search for road building aggregates.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

All the areas that will be tested have similar soil structures and landforms of stable gentle slopes with no large gullies or active erosion. All sites are well vegetated with little bare ground and no signs of current erosion.

Almost all the soils that will be affected are rated as slight for off-road erosion on USDA Web Soil Survey. The few soils that are rated as moderate should not cause any large amounts of erosion because the disturbances will be small and disconnected.

No cumulative effects to geology and soil quality, stability and moisture are anticipated.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

None of the test areas are going to be near a surface water source. There is a canal on one tract but the work will occur far from it. There will be no change in water distribution or quality from this project. There may be some runoff that causes temporarily higher sediment loads in ephemeral streams but the disturbances are small and scattered so they should not contribute much sediment to runoff.

No cumulative effects to the water resources are anticipated.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Air quality will be locally and temporarily affected by the dust and exhaust of a mini excavator. These affects will not persist beyond the day of testing and will be locally concentrated. The only population affected will be the operators of the equipment.

No cumulative effects to air quality are anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Only small areas of vegetation will be disturbed by this testing. The areas are small enough that they will be naturally reseeded by the surrounding vegetation within a couple years. This testing will only disturb small 2ft x 8ft areas that will all be disconnected, since the disturbance will not affect large areas there will be little cumulative affects.

If re-seeding is necessary the proponent will acquire certified, weed free seed and refer to the Plant Materials Tech Note No. MT-46 (Rev. 4) dated September 2013 for seeding rates.

No long term cumulative effects to vegetation are anticipated.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The areas that being tested are mostly open grasslands. There are not any rare habitats that will be disturbed and any active nests or burrows will be avoided.

No wetlands or aquatic habitats will be affected in the scope of this project.

No cumulative effects are anticipated.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Species of Concern
6 Species
Filtered by the following criteria:
Township = 010N019E (based on mapped Species Occurrences)

BIRDS (AVES) — 6 SPECIES — TOWNSHIP = 010N019E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Anthus spragueii Sprague's Pipit	*Motacillidae* Pipits	G3G4	S3B	MBTA; BCC11; BCC17		SENSITIVE	SGCN3	18%	67%	Grasslands
		Species Occurrences verified in these Counties: Blaine, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Ponders, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux State Rank Reason: Although population trends in Montana appear to be relatively stable in recent years, populations have been in decline over the long run and the species faces threats from cover-type conversion, overgrazing, exotic plant invasions, altered fire regimes, and mowing prior to fledgling of young.								
Centrocercus urophasianus Greater Sage-Grouse	*Phasianidae* Upland Game Birds	G3G4	S2		Sensitive - Known on Forests (BD) Sensitive - Suspected on Forests (CG, HLC)	SENSITIVE	SGCN2	17%	75%	Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Hill, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Rosebud, Silver Bow, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Charadrius montanus Mountain Plover	*Charadriidae* Plovers	G3	S2B	MBTA; BCC11; BCC17		SENSITIVE	SGCN2	20%	73%	Grasslands
		Species Occurrences verified in these Counties: Blaine, Broadwater, Carbon, Fergus, Garfield, Golden Valley, Jefferson, Madison, Musselshell, Petroleum, Phillips, Rosebud, Teton, Toole, Treasure, Valley, Wheatland								
Nucifraga columbiana Clark's Nutcracker	*Corvidae* Jays / Crows / Magpies	G5	S3	MBTA	Species of Conservation Concern on Forests (FLAT)		SGCN3	9%	84%	Conifer forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Wheatland, Yellowstone								
Numenius americanus Long-billed Curlew	*Scolopacidae* Sandpipers	G5	S3B	MBTA; BCC10; BCC11; BCC17		SENSITIVE	SGCN3	19%	100%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Spizella breweri Brewer's Sparrow	*Passerellidae* New World Sparrows	G5	S3B	MBTA; BCC10; BCC17		SENSITIVE	SGCN3	12%	100%	Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Species faces threats from loss of sagebrush habitats it is dependent on as a result of habitat conversion for agriculture and increased frequency of fire as a result of weed encroachment and drought.								

Species of Concern
8 Species
Filtered by the following criteria:
Township = 011N020E (based on mapped Species Occurrences)

MAMMALS (MAMMALIA) — 3 SPECIES — TOWNSHIP = 011N020E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Lasiurus cinereus Hoary Bat	*Vespertilionidae* Bats	G3G4	S3				SGCN3	2%	100%	Riparian and forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Sorex nanus Dwarf Shrew	*Soricidae* Shrews	G4	S2S3				SGCN2,3	14%	67%	Rocky habitat
		Species Occurrences verified in these Counties: Beaverhead, Carbon, Carter, Chouteau, Dawson, Deer Lodge, Fergus, Golden Valley, Hill, Judith Basin, Ponders, Toole State Rank Reason: Observations of this species are infrequent resulting in limited data to assess threats. Species may only breed once in its brief life, so is more vulnerable than many small mammal species.								
Sorex preblei Preble's Shrew	*Soricidae* Shrews	G4	S3				SGCN3	28%	79%	Sagebrush grassland
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Chouteau, Dawson, Deer Lodge, Fergus, Golcatin, Golden Valley, Granite, Judith Basin, Lewis and Clark, Lincoln, Madison, Missoula, Phillips, Powell, Ravalli, Sheridan, Silver Bow, Sweet Grass, Teton, Valley, Wheatland State Rank Reason: Observations of this species are infrequent resulting in limited data to assess threats. Species may only breed once in its brief life, so is more vulnerable than many small mammal species.								

BIRDS (AVES) — 5 SPECIES — TOWNSHIP = 011N020E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Certhia americana Brown Creeper	*Certhiidae* Creepers	G5	S3	MBTA			SGCN3	4%	53%	Moist conifer forests
		Species Occurrences verified in these Counties: Beaverhead, Broadwater, Carbon, Carter, Cascade, Chouteau, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Powder River, Powell, Ravalli, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland								
Charadrius montanus Mountain Plover	*Charadriidae* Plovers	G3	S2B	MBTA; BCC11; BCC17		SENSITIVE	SGCN2	20%	73%	Grasslands
		Species Occurrences verified in these Counties: Blaine, Broadwater, Carbon, Fergus, Garfield, Golden Valley, Jefferson, Madison, Musselshell, Petroleum, Phillips, Rosebud, Teton, Toole, Treasure, Valley, Wheatland								
Haemorhous cassinii Cassin's Finch	*Fringillidae* Finches	G5	S3	MBTA; BCC10			SGCN3	11%	62%	Drier conifer forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Broadwater, Carbon, Cascade, Chouteau, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Powder River, Powell, Ravalli, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland, Yellowstone State Rank Reason: Data show recent short-term declines in population for this species.								
Nucifraga columbiana Clark's Nutcracker	*Corvidae* Jays / Crows / Magpies	G5	S3	MBTA	Species of Conservation Concern on Forests (FLAT)		SGCN3	9%	84%	Conifer forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Powder River, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Wheatland, Yellowstone								
Spizella breweri Brewer's Sparrow	*Passerellidae* New World Sparrows	G5	S3B	MBTA; BCC10; BCC17		SENSITIVE	SGCN3	12%	100%	Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Species faces threats from loss of sagebrush habitats it is dependent on as a result of habitat conversion for agriculture and increased frequency of fire as a result of weed encroachment and drought.								

Species of Concern
8 Species
Filtered by the following criteria:
Township = 008N015E (based on mapped Species Occurrences)

MAMMALS (MAMMALIA) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Lasiurus cinereus Hoary Bat	*Vespertilionidae* Bats	G3G4	S3				SGCN3	2%	100%	Riparian and forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								

BIRDS (AVES) — 5 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

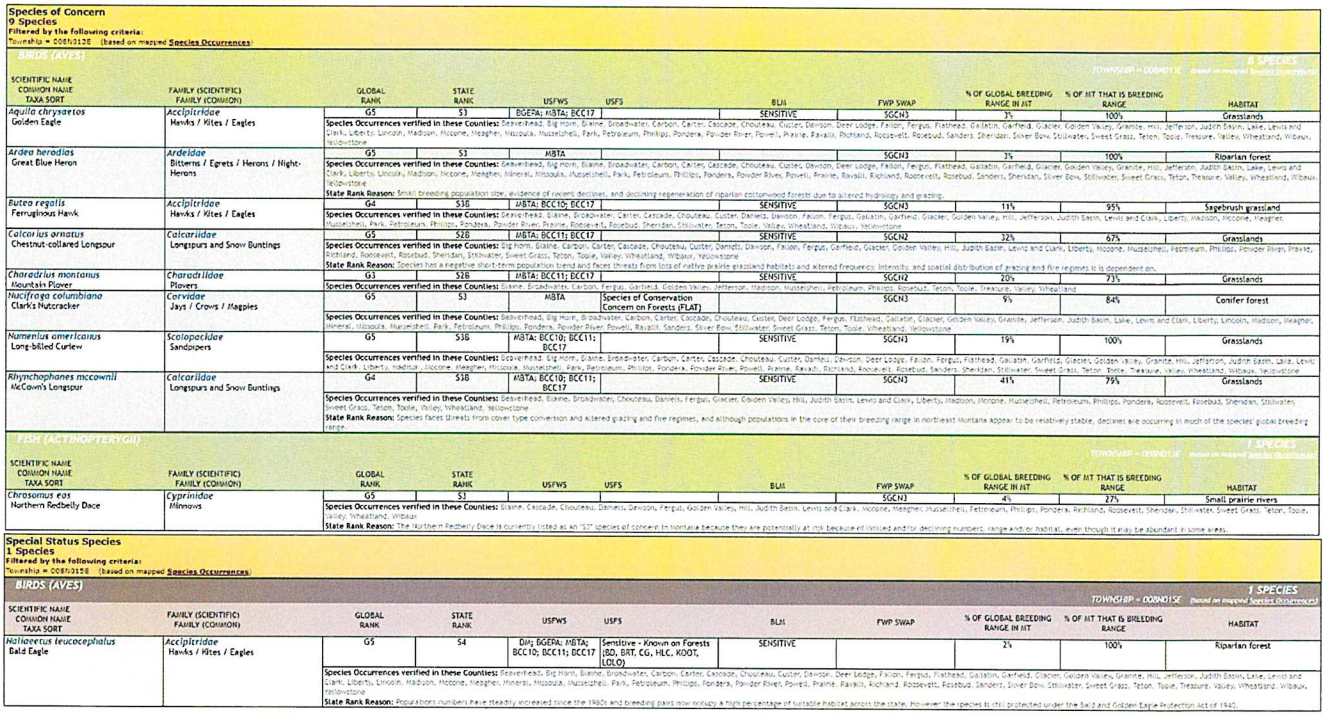
SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Buteo regalis Ferruginous Hawk	*Accipitridae* Hawks / Kites / Eagles	G4	S3B	MBTA; BCC10; BCC17		SENSITIVE	SGCN3	11%	95%	Sagebrush grassland
		Species Occurrences verified in these Counties: Beaverhead, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Jefferson, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Prairie, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone								
Catharus fuscescens Veery	*Turdidae* Thrushes	G5	S3B	MBTA		SENSITIVE	SGCN3	6%	100%	Riparian forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Cascade, Chouteau, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland, Yellowstone								
Charadrius montanus Mountain Plover	*Charadriidae* Plovers	G3	S2B	MBTA; BCC11; BCC17		SENSITIVE	SGCN2	20%	73%	Grasslands
		Species Occurrences verified in these Counties: Blaine, Broadwater, Carbon, Fergus, Garfield, Golden Valley, Jefferson, Madison, Musselshell, Petroleum, Phillips, Rosebud, Teton, Toole, Treasure, Valley, Wheatland								
Numenius americanus Long-billed Curlew	*Scolopacidae* Sandpipers	G5	S3B	MBTA; BCC10; BCC11; BCC17		SENSITIVE	SGCN3	19%	100%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Ponders, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Rhynchophanes mccownii McCown's Longspur	*Calcariidae* Longspurs and Snow Buntings	G4	S3B	MBTA; BCC10; BCC11; BCC17		SENSITIVE	SGCN3	41%	79%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Blaine, Broadwater, Chouteau, Daniels, Fergus, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Musselshell, Petroleum, Phillips, Ponders, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Yellowstone State Rank Reason: Species faces threats from cover type conversion and altered grazing and fire regimes, and although populations in the core of their breeding range in northeast Montana appear to be relatively stable, declines are occurring in much of the species' global breeding range.								

REPTILES (REPTILIA) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Phrynosoma hernandesi Greater Short-horned Lizard	*Phrynosomatidae* Sagebush / Spiny Lizards	G5	S3		Sensitive - Known on Forests (CG) Sensitive - Suspected on Forests (HLC)	SENSITIVE	SGCN3, SGIN	19%	66%	Sandy / gravelly soils
		Species Occurrences verified in these Counties: Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Lewis and Clark, Liberty, Mccone, Musselshell, Petroleum, Phillips, Ponders, Powder River, Prairie, Richland, Roosevelt, Rosebud, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								

FISH (ACTINOPTERYGII) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Chrosomus eos Northern Redbelly Dace	*Cyprinidae* Minnows	G5	S3				SGCN3	4%	27%	Small prairie rivers
		Species Occurrences verified in these Counties: Blaine, Cascade, Chouteau, Daniels, Dawson, Fergus, Golden Valley, Hill, Judith Basin, Lewis and Clark, Mccone, Meagher, Musselshell, Petroleum, Phillips, Ponders, Richland, Roosevelt, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux State Rank Reason: The Northern Redbelly Dace is currently listed as an "SSS" species of concern in Montana because they are potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.								



Species of Concern
9 Species
Filtered by the following criteria:
Township = 008N015E (based on mapped Species Occurrences)

BIRDS (AVES) — 8 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Aquila chrysaetos Golden Eagle	*Accipitridae* Hawks / Kites / Eagles	G5	S3	BGEPA; MBTA; BCC17		SENSITIVE	SGCN3	3%	100%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone					
Ardea herodias Great Blue Heron	*Ardeidae* Bitterns / Egrets / Herons / Night-Herons	G5	S3	MBTA			SGCN3	3%	100%	Riparian forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Treasure, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Small breeding population size, evidence of recent declines, and declining regeneration of riparian cottonwood forests due to altered hydrology and grazing.					
Buteo regalis Ferruginous Hawk	*Accipitridae* Hawks / Kites / Eagles	G4	S3B	MBTA; BCC10; BCC17		SENSITIVE	SGCN3	11%	95%	Sagebrush grassland
		Species Occurrences verified in these Counties: Beaverhead, Blaine, Broadwater, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Jefferson, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Prairie, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone					
Calcarius ornatus Chestnut-collared Longspur	*Calcariidae* Longspurs and Snow Buntings	G5	S2B	MBTA; BCC11; BCC17		SENSITIVE	SGCN2	32%	67%	Grasslands
		Species Occurrences verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Garfield, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Mccone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Species has a negative short-term population trend and faces threats from loss of native prairie grassland habitats and altered frequency, intensity, and spatial distribution of grazing and fire regimes it is dependent on.					
Charadrius montanus Mountain Plover	*Charadriidae* Plovers	G3	S2B	MBTA; BCC11; BCC17		SENSITIVE	SGCN2	20%	73%	Grasslands
		Species Occurrences verified in these Counties: Blaine, Broadwater, Carbon, Fergus, Garfield, Golden Valley, Jefferson, Madison, Musselshell, Petroleum, Phillips, Rosebud, Teton, Toole, Treasure, Valley, Wheatland								
Nucifraga columbiana Clark's Nutcracker	*Corvidae* Jays / Crows / Magpies	G5	S3	MBTA	Species of Conservation Concern on Forests (FLAT)		SGCN3	9%	84%	Conifer forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Wheatland, Yellowstone					
Numenius americanus Long-billed Curlew	*Scolopacidae* Sandpipers	G5	S3B	MBTA; BCC10; BCC11; BCC17		SENSITIVE	SGCN3	19%	100%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone					
Rhynchophanes mccownii McCown's Longspur	*Calcariidae* Longspurs and Snow Buntings	G4	S3B	MBTA; BCC10; BCC11; BCC17		SENSITIVE	SGCN3	41%	79%	Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Blaine, Broadwater, Chouteau, Daniels, Fergus, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Musselshell, Petroleum, Phillips, Pondera, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Yellowstone State Rank Reason: Species faces threats from cover type conversion and altered grazing and fire regimes, and although populations in the core of their breeding range in northeast Montana appear to be relatively stable, declines are occurring in much of the species' global breeding range.					

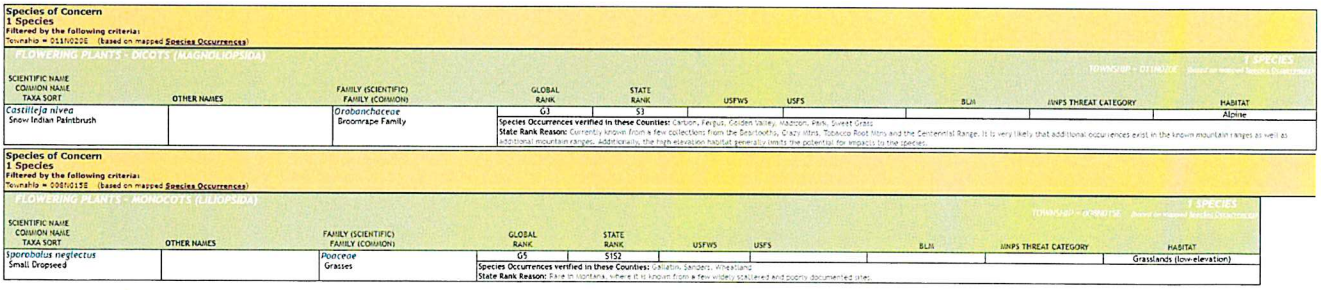
FISH (ACTINOPTERYGII) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Chrosomus eos Northern Redbelly Dace	*Cyprinidae* Minnows	G5	S3				SGCN3	4%	27%	Small prairie rivers
		Species Occurrences verified in these Counties: Blaine, Cascade, Chouteau, Daniels, Dawson, Fergus, Golden Valley, Hill, Judith Basin, Lewis and Clark, Mccone, Meagher, Musselshell, Petroleum, Phillips, Pondera, Powder River, Powell, Ravalli, Richland, Roosevelt, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux State Rank Reason: The Northern Redbelly Dace is currently listed as an "S3" species of concern in Montana because they are potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.					

Special Status Species
1 Species
Filtered by the following criteria:
Township = 008N015E (based on mapped Species Occurrences)

BIRDS (AVES) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Haliaeetus leucocephalus Bald Eagle	*Accipitridae* Hawks / Kites / Eagles	G5	S4	DM; BGEPA; MBTA; BCC10; BCC11; BCC17	Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)	SENSITIVE		2%	100%	Riparian forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Populations numbers have steadily increased since the 1980s and breeding pairs now occupy a high percentage of suitable habitat across the state. However the species is still protected under the Bald and Golden Eagle Protection Act of 1940.					



Species of Concern
1 Species
Filtered by the following criteria:
Township = 011N022E (based on mapped Species Occurrences)

FLOWERING PLANTS - DICOTS (MAGNOLIOPSIDA) — 1 SPECIES — TOWNSHIP = 011N022E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Castilleja nivea Snow Indian Paintbrush		*Orobanchaceae* Broomrape Family	G3	S3					Alpine
			Species Occurrences verified in these Counties: Carbon, Fergus, Golden Valley, Madison, Park, Sweet Grass State Rank Reason: Currently known from a few collections from the Beartooths, Crazy Mtns, Tobacco Root Mtns and the Centennial Range. It is very likely that additional occurrences exist in the known mountain ranges as well as additional mountain ranges. Additionally, the high elevation habitat generally limits the potential for impacts by the species.					

Species of Concern
1 Species
Filtered by the following criteria:
Township = 008N015E (based on mapped Species Occurrences)

FLOWERING PLANTS - MONOCOTS (LILIOPSIDA) — 1 SPECIES — TOWNSHIP = 008N015E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Sporobolus neglectus Small Dropseed		*Poaceae* Grasses	G5	S1S2					Grasslands (low-elevation)
			Species Occurrences verified in these Counties: Gallatin, Sanders, Wheatland State Rank Reason: Rare in Montana, where it is known from a few widely scattered and poorly documented sites.						

Above are the Montana Natural Heritage Project's animal species of concern reports for each township where work will be done. There are a lot of species that may be affected but since the work will only be for several hours in each of these places and there will be no large disturbances there should be no significant adverse effects on these animals.

One exception is that the dwarf or Preble's shrew may be disturbed because they live below ground. This is hard to mitigate. Both these shrew species were observed 20+ years ago and both of them only had one sighting. Because they are so rare it is unlikely to have an encounter with one of these two shrews however all recently active small burrows will be avoided as a mitigation measure.

Temporary displacement may occur. No population effect is anticipated.

There are several plant species of concern in the areas where digging will occur. Both of the these plants had one observation in the general area and both observations were 30+ years ago. It is unlikely that these plants will be seen, however several people doing the work have extensive botanical training and will be informed to watch out for these plants. Having trained personnel present during the excavation will mitigate the probability of disturbing one of these species of concern.

Temporary displacement may occur No population effect is anticipated.
No cumulative effects to habitat are anticipated.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that *Antiquities* have not been identified in the APE. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

In 8N 13E 14 there is a historic canal. This site will not be affected because all of the work will be done several hundred yards to the north and 10-20 ft higher in elevation than the canal.

There are some documented cairns located 11N 20E 36. These were previously documented by the DNRC archaeologist. They are all located ½ mile north of where the work will be done.

The DNRC archeologist will be on site when the work is done on all these sections, he will give guidance if any cultural resources are found in the test area. Due to the nature of the work any cultural resources could be easily avoided because testing is just to determine the presence and extent of gravel resources over a large area so pits do not have to be in set locations.

No effects on historical, archaeological, or paleontological resources anticipated.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Some small areas will be disturbed with a backhoe but they will be one bucket wide. Because of the small disturbed area the disturbances will recover quickly. Disturbances will not be evident from any major roads.

No long term direct or cumulative effects to aesthetics are anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No demands on limited resources are required for this project.

No direct or cumulative effects to environmental resources are anticipated.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other projects or plans being considered on the tracts listed in this EA Checklist.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

Some hazards to safety in the operation of equipment but proper distances from operation will be maintained by all unauthorized personnel.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

This project will not add to or deter from other industrial, agricultural, or commercial activities in this area.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The project will not create any new jobs. These positions are already held by employees of the proponent. No cumulative effects to the employment market are anticipated.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

There are no direct or cumulative effects to taxes or revenue for the proposed project.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There will not be any increases in traffic or traffic patterns if this project is approved.

There will be no direct or cumulative effects on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There are no zoning or other agency management plans affecting this project.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

There will be no direct or cumulative effects on recreation or wilderness activities.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposed project does not include any changes to housing or developments. Population and housing will not be affected.

No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

The proposed project will have no effect on any unique quality of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

This project will have no immediate return to the trust. Gravel from resources identified by these test pits will provide information for DNRC to sell gravel resources in the future. This information could result in large long term returns to the trust.

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed Action) – Under this alternative, the Department does grant a test permit to search for road building aggregates.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

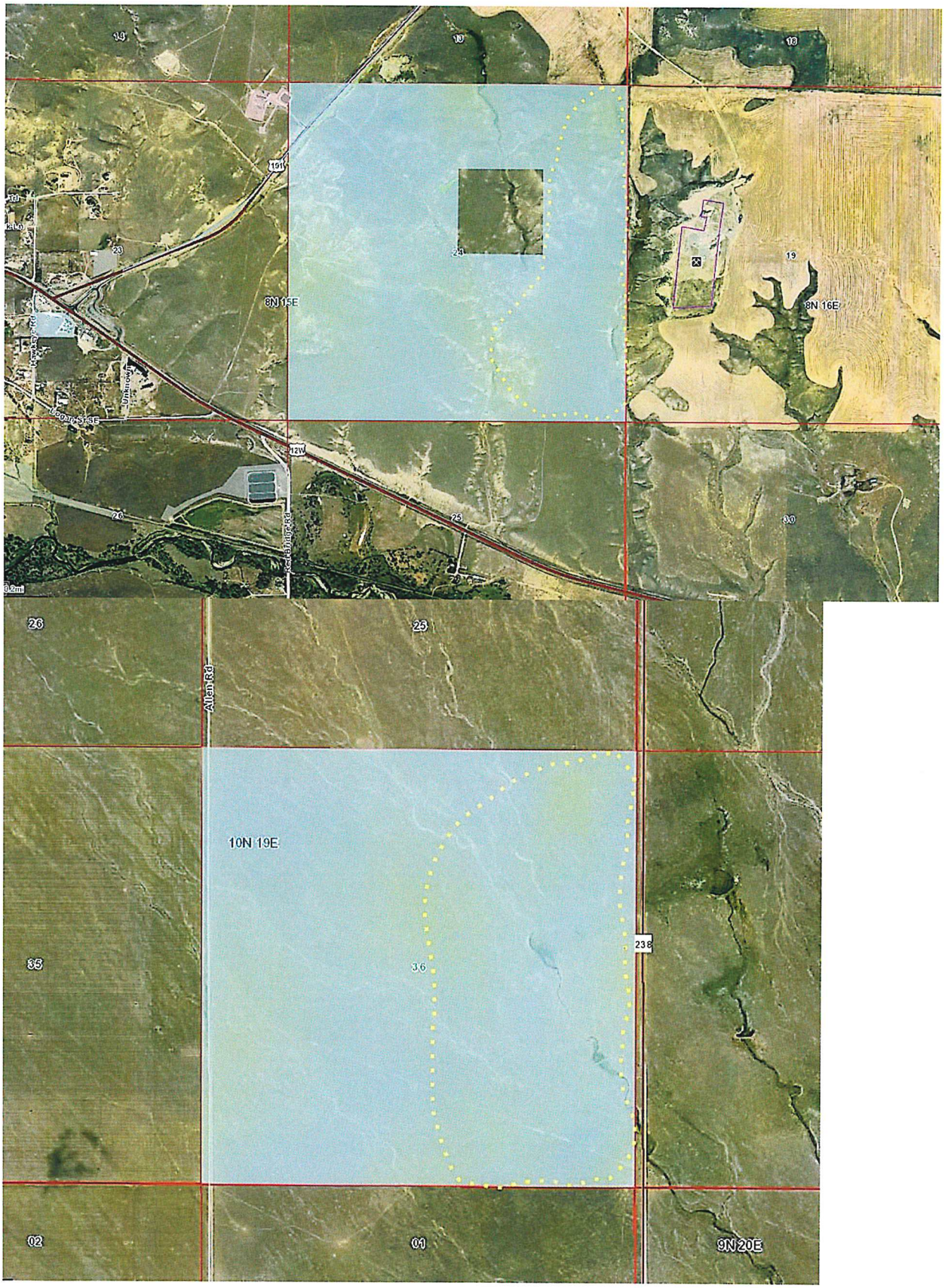
I have evaluated the potential environment effects and have determined that no negative long-term environmental impacts will result from the proposed activity.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	XXX	No Further Analysis

EA Checklist Prepared By:	Name: Dustin Lenz Title: Land Use Specialist
Signature: Dustin Lenz	Date: 6/18/19

EA Checklist Approved By:	Name: Jocee Hedrick Title: Unit Manager, Northeastern Land Office
Signature: Jocee Hedrick	Date: 6/18/19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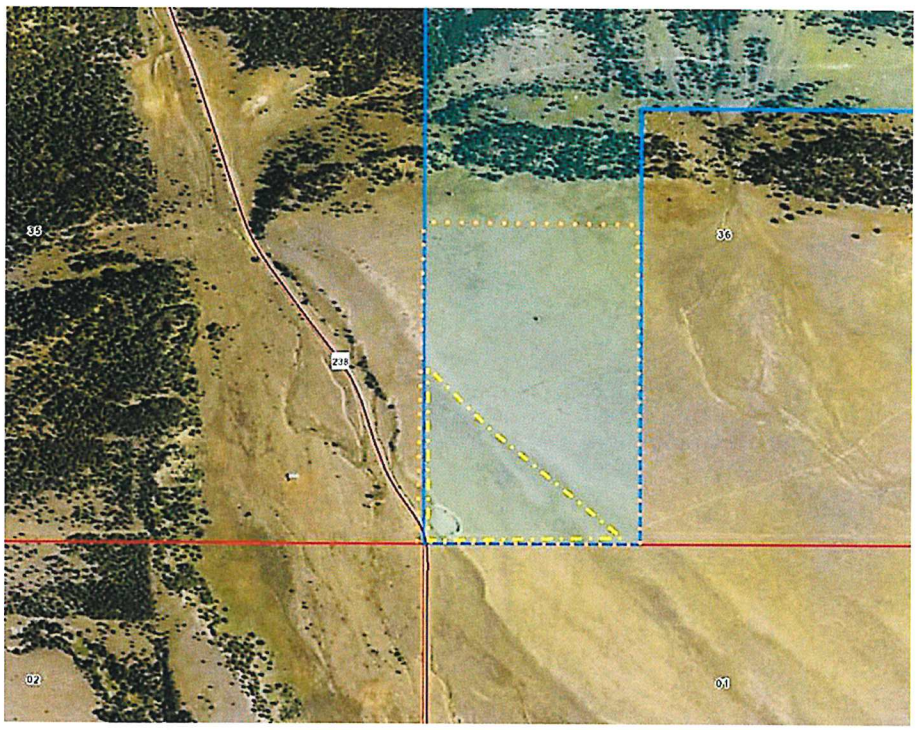
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